

Frequency Of Splenomegaly In Patients With Abdominal Ultrasound

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ABSTRACT

Aims and objectives: To find out the frequency of splenomegaly in patients with abdominal ultrasound **Methods:** This prospective cross-sectional study was conducted at the Radiology Department of City Care Hospital in Gujranwala. A total of 65 participants with pain in the left upper quadrant were included in the study. Patients ranged in age from 21 to 75 years old, with 37 men and 28 females. **Statistical analysis** was then performed using SPSS. In individuals with left upper quadrant pain, the frequency of splenomegaly is calculated. Results: Out of 65 patients who presented with splenomegaly, positive cases for splenomegaly reported were 26 and negative cases were 39

Conclusion: For detecting splenomegaly, sonography is a good modality with numerous advantages. It is nonionizing radiation free, relatively inexpensive, widely available, and simple to use, with a high diagnostic effectiveness. Patients who have complained of abdominal pain have been concluded.

Keywords: Ultrasonography, lymphadenopathy, spleen, splenomegaly, spleen radiology

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INTRODUCTION

Physical indications such as enlarged lymph nodes or a palpable spleen tip are extremely prevalent, although they are not always indicative of illness. (1-2)

Splenomegaly can be identified by palpation during a physical examination. However, just because the spleen isn't palpable doesn't imply it hasn't been transformed. It is now standard procedure to Assess splenomegaly using the findings of volume changes of the spleen, which may be detected using a variety of approaches, including such as radiography, scintigraphy, computed tomography, and

magnetic resonance imaging ultrasound and magnetic resonance imaging.(9)(Izranov, Palvanova et al. 2019)in any case, lymphadenopathy or splenomegaly could be the first sign, or even the only sign, of a serious or life-threatening condition, so doctors should be able to accurately determine when lymphadenopathy or splenomegaly is potentially pathologic, and clinicians should be familiar with current analytic methodologies for evaluating these findings

Symptomatic and asymptomatic patients can both have lymphadenopathy and splenomegaly. Each result could be the result of a wide range of illnesses, from non-malignant ailments like inflammatory disorders or acute or chronic infections to malignant processes like hematological malignancies or metastatic carcinomas.

(4, 5) Lymphocytic sites and characteristics, as well as the age of lymphadenopathy.

MATERIAL AND METHODOLOGY:

For two months, this cross-sectional investigation was conducted.

The data was collected using a simple Sampling approach.

A total of 65 patients who presented to the radiology department with left upper abdominal quadrant pain and suspected bleeding were included in the study.

Patients of all ages were enrolled in the study. A skilled Sonologist used a proSound ultrasound system to perform the scan. After gathering information about the patients' demographic data was also taken, and the presence or absence of splenomegaly and lymphadenopathy was determined. Lymphadenopathy and other problems were also identified. The Statistical Package for the Social Sciences (SPSS) version 20 is used to enter and analyze data. The mean and standard deviation were used to express quantitative data, while the mean and standard deviation were used to describe qualitative data.

RESULTS:

This study included a total of 65 patients from all age categories. The mean age was found to be 38.65 ± 19.45 , with a minimum age of 21 years and a maximum age of 75 years.

There are 65 Patients of the splenomegaly up of 35 are male (53.8%) and 30 patients of female (46.2%). (Table 1)

Out of 65 cases splenomegaly is present in 26 (40.0%) persons and persons have absent 39 (60.0%). (Table 2)

Out of 65 patients there are 19(29.2%) persons who have lymphadenopathy and 46 (70.8%) patients have absent lymphadenopathy (Table 3)

Out of 65 patients spleen size 8-12 have 39(60.0%) patients with 13-19 have 26(40.0). (Table 4)

Table 1: Gender

Gender	Frequency	Percent (%)
Male	35	53.8
Female	36	46.2
Total	655	100.0

Table 2: - Splenomegaly

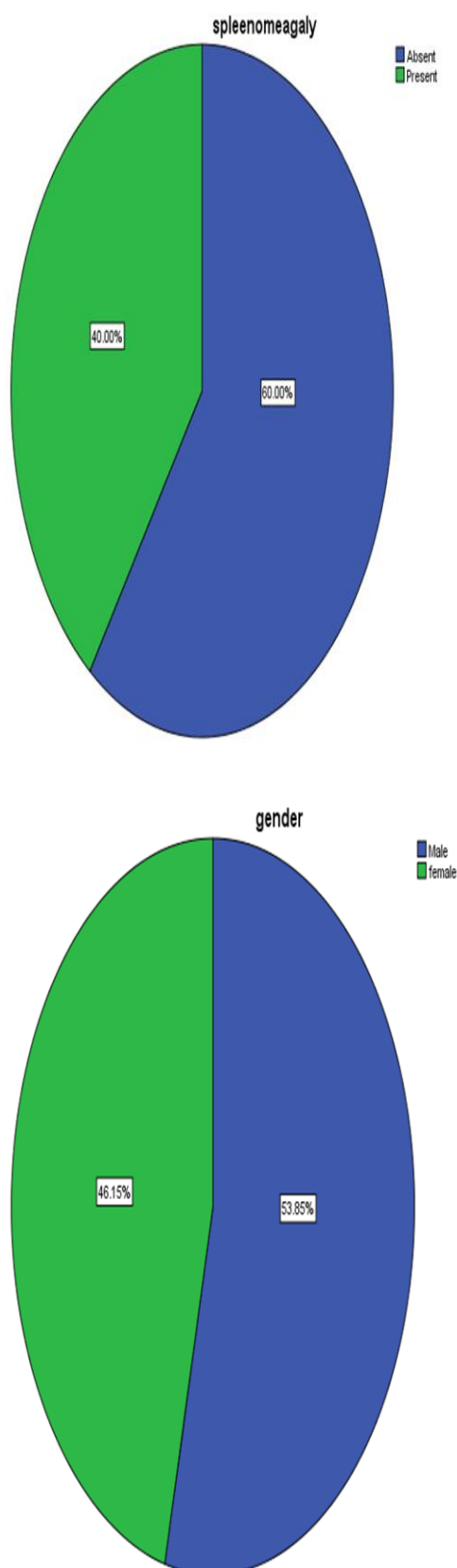
	Frequency	Percentage %
Absent	39	60.0
Present	26	40.0
Total	65	100.0

Table 3: Lymphadenopathy

	frequency	percentage%
Absent	46	70.8
present	19	29.2
total	65	100

Table 4: Spleen size

	frequency	percentage %
8-12	39	60.0
13-19	26	40.0
total	65	100



DISCUSSION:

In this study, we focused on the ability of ultrasound imaging to determine the splenomegaly in the patients with abdominal pain and associated disorders such as

lymphadenopathy which is defined as the inflammatory type producing swelling enlarged lymph nodes. It happens when spleen become enlarged Splenomegaly can be detected by palpating and percussing the abdomen.

Although these methods appear to be comprehensive, each may fail to detect splenic enlargement. According to this study out of 65 patients that are reported with pain splenomegaly is present in 26 patients. This study found that out of 100% patients that are reported with abdominal pain lymphadenopathy is present in 19 patients. Also, it is found that more splenomegaly is present in male than female. However, the incidence of splenomegaly is most common in the age group of 21 to 30 years.

Dietary factors play an important role in the pathogenesis of spleen. Excessive drinking can cause cirrhosis, a liver condition that can lead to an enlarged spleen. It's crucial to identify pathological alterations in spleen size in young person. To notice any abnormal alterations, it's important to understand the normal ranges. The size of the spleen varies depending on the age group. This research gives a detailed and practical guide to the normal splenic length in humans with abdominal scan. The spleen's normal range limit determined in this study could be used as a reference in local radiology clinics on a regular basis.

This research is, to the best of our knowledge, evaluated the link between a person's spleen size and his or her entire body size, including age, height, weight, BMI and BSA.

Limitations:

The limitations of this study include the small sample size and lack of supportive data which could have been achieved by using some other modalities such as CT scan.

CONCLUSION:

Patients with grade III, IV, or V splenomegaly are more likely to have hemolytic anemia as a common explanation, and hematological research should be prioritized in splenomegaly cases.

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